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EXPLORATORY STUDY OF POTENTIAL PHYTOPATHOGENS IN *Mangifera indica* IN THE CITY OF SAN LORENZO, PARAGUAY

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In Paraguay, the mango (*Mangifera indica*) is a significant fruit in local culture, with trees commonly found in households and frequently consumed during ripening. In 2022, reports emerged of premature deterioration in the fruits, raising questions about the potential phytopathogens affecting mangoes. Given the lack of records on these pathogens, identifying them became essential. This study focused on the city of San Lorenzo, where 15 samples of fruits and inflorescences showing signs of disease were collected from three trees. Portions of the pericarp and mesocarp of each fruit, as well as sections of the flowers, were disinfected using sodium hypochlorite, followed by 70% alcohol, and sterile water, with each step lasting 30 seconds. The samples were inoculated on Potato Dextrose Agar, Malachite Green Agar, and Nutrient Agar, and incubated at 25°C for 7 days. The presence of fungi was recorded, and identification was performed at the genus level based on conidial and conidiophore morphology using optical microscopy. The inflorescences were found to contain *Macrophomina* spp., *Alternaria* spp., *Pestalotiopsis* spp., *Fusarium* spp. and *Trichoderma* spp.; the mesocarp contained *Alternaria* spp., *Aspergillus* spp., *Rhizopus* spp., *Cladosporium* spp., *Pestalotiopsis* spp. and *Fusarium* spp.; and the endocarp primarily contained sterile mycelium, with smaller amounts of *Aspergillus* spp., *Pestalotiopsis* spp. and *Cladosporium* spp. These results represent a crucial initial step towards the identification and subsequent characterization of the phytopathogens affecting *Mangifera indica* in the city of San Lorenzo.

Palabras clave: Fungal identification- Mango diseases- Pathogen isolation